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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/721,310	11/25/2003	Go Iwasaki	81788.0261	7084

26021 7590 08/17/2005

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EXAMINER

LE, THONG QUOC

ART UNIT PAPER NUMBER

2827

DATE MAILED: 08/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/721,310	IWASAKI, GO	
	Examiner	Art Unit	
	Thong Q. Le	2827	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 13-19 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1, 13 and 14 is/are allowed.
- 6) ☒ Claim(s) 2-4 and 7-10, 15-19 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

1. Amendment filed on 07/07/2005 has been entered.
2. Claims 1-10, 13-19 are presented for examination.

Priority

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Objections

4. Regarding claim 2, lines 7-8, should be change "common nodes " to --common node--.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 2-4, 7-10, 15-19 are rejected under 35 U.S.C. 102(b) as being anticipated by McClure et al. (U.S. Patent no. 6,812,734).

Regarding claims 2-4, 7-10, 15-19, McClure et al. discloses an output buffer circuit (Figure 1) comprising:

a plurality of unit circuits (20₀, 22₀) in each of which a pull-up transistor (16) controlled by an input signal (IN₀) are connected in series between a high-potential

power supply (Vcc) and common node (Figure 1), and a plurality of pull-down transistors (18) controlled by an input signal (DIS_) are connected in series between the common node and a low-potential power supply (Figure 1), and output terminal connected to a common connecting point of the common node of the plurality of unit circuit (Figure 1, circuits 20, 22 connected at D₀), first resistors formed respectively between the common node of the plurality of unit circuits and the common connecting point (first resistors in Figure 1 are 12₀ and 14₀ , as disclosed in claims 10, the resistors can be a transistor). More specifically, McClure et al. disclose second resistors (R1₀, R2₀) formed respectively between the high-potential power supply and pull-up transistor and between the pull-down transistor and low-power supply in each of the plurality of unit circuits, and the plurality of first resistors formed between the common node and output terminal have the same resistance (*transistors 12₀, 14₀ are the same and they are selected from the group elements as defined in claim 10 of present application*), and the pull-up and pull-down transistors are transistors (Figure 1, 16, 18).

Allowable Subject Matter

7. Claims 5-6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 5-6 include allowable subject matter since the prior art made of record and considered pertinent to the applicant's disclosure does not teach or suggest the claimed limitations. McClure et al. (U.S. Patent No. 5,099,148), and others, does not

teach the claimed invention having a third transistors formed respectively between the pull-up transistors and common node and between the common node and pull-down transistors.

8. Claims 1, 13-24 are allowed.

Claims 1, 13-14 include allowable subject matter since the prior art made of record and considered pertinent to the applicant's disclosure does not teach or suggest the claimed limitations. McClure et al. (U.S. Patent No. 5,099,148), and others, does not teach the claimed invention having a plurality of unit circuits in each of which a pull-up transistor controlled by a first input signal is connected between a high-potential power supply and common node, and a first pull-down transistor controlled by a second input signal and a second pull-down transistor controlled by a third input signal are connected in series between said common node and a low-potential power supply as claim 1 discloses, and third transistors formed respectively between the pull-up transistors and common node and between the common node and pull-down transistors as claims 13-14 disclosed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thong Q. Le whose telephone number is 571-272-1783. The examiner can normally be reached on 8:00am-5:00pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoai V. Ho can be reached on 571-272-1777. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2827

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Thong Q. Le
Primary Examiner
Art Unit 2827

THONG LE
PRIMARY EXAMINER